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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/620,802

07/17/2003

Hajime Yoshino

041465-5194

8997

55694 7590 10/05/2007
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EXAMINER

FAULK, DEVONA E

ART UNIT

PAPER NUMBER

2615

MAIL DATE

DELIVERY MODE

10/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/620,802

Applicant(s)

YOSHINO, HAJIME

Examiner

Devona E. Faulk

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 and 12 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, filed 7/6/2007, with respect to the 102 and 103 rejections of claims 1-12 have been fully considered and are persuasive. The 102 and 103 rejections of claims 1-12 have been withdrawn.

2. Applicant's arguments, filed 7/6/2007, with respect to the rejection(s) of claim(s) 9 and 10 under 112 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of 101 rejections.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 9 and 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 9 and 10 recite "a program, carried out by a computer. A program is non-statutory subject matter.

Examples of acceptable language in computer-processing related claims :

1. "computer readable medium" encoded with _____
[a] "a computer program"
[b] "software"
[c] "computer executable instructions"
[d] "instructions capable of being executed by a computer"
2. "a computer readable medium" _____ "computer program"
[a] storing a
[b] embodied with a

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[c] encoded with a
[d] having a stored
[e] having an encoded

Claim Rejections - 35 USC § 112

4. Claims 1,2,4-8,9,11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1, 9 and 11 recite " .. to estimate a relative level of the signal component in each variable-level band on the basis of a level of the signal component in the fixed level band in the target frequency characteristic...". The specification is not enabling as to how this is done.

Allowable Subject Matter

5. Claims 3 and 12 are allowed.

6. The following is an examiner's statement of reasons for allowance:

Regarding claims 3 and 12, prior art Velmer (US 5,515,446).discloses a frequency characteristic adjustment apparatus in which an inputted signal is subjected to adjustment for making a frequency characteristic of the signal agree with a target frequency characteristic (Figure 1), the apparatus comprising: an estimation device configured to divide the inputted signal into a signal component falling into a plurality of signal components and to estimate a relative level of the signal component (22 channel accurate reproduction circuit, Figure 1; column 5, lines 45-column 6-line 5); an

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adjustment device configured to adjust the level of the signal component of each variable-level band of the signal based on the estimated relative level of the signal component in each variable-level band (62,64,66,68,70,72,74, 76 limiters , Figure 1; column 6, lines 5-24); and an output device configured to output the signal adjusted by the adjustment device (output circuit 24, Figure 1). Prior art Ouchi et al. (US 6,072,879) discloses a sound field control device comprising equalizers 134 and 140 and that a fixed level band is centered at a frequency of 1kHz (column 11, lines 36-65). Prior art Sasaki (US 6,996,240) teaches of equalizing the sound source and the sound picked up by the microphone (column 3, lines 17-46). Prior art Berkovitz et al. (US 4,458,362) discloses a computer program that implements equalization (column 15, lines 33-40). Prior art Lawton (US 5,987,145) discloses a digital audio equalizer. The prior art or combination thereof fails to disclose or make obvious dividing an audio signal into a signal component falling into one fixed level band and one or more signal components falling into one or more variable level bands and to adjust levels of the signal components in only the variable level bands of the audio signal.

Therefore the prior art or combination thereof fails to disclose or make obvious a frequency characteristic adjustment apparatus and a method of adjusting a frequency characteristic of an input audio signal as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 571-272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DEF


VIVIAN CHIN
SUPERVISOR, PATENT EXAMINER
TECHNOLOGY CENTER 2030

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